HAULING LIVESTOCK- ACCIDENTS HAPPEN

Dr. Matthew Turner, DVM
Prestage Farms
Clinton, NC

When hauling livestock, traffic accidents are especially difficult. When swine producers respond to a livestock trailer wreck we view the response as an organized recovery effort, but the general public passing by may not interpret what they see in the same light. There are many areas of concern including worker safety, public safety, animal welfare, public relations, and environmental contamination. Every person that passes by will have a unique perspective on the events taking place, including your actions. The goal of this session is to increase awareness of participants to some important issues relating to livestock trailer accidents. Participants will understand the need for developing a plan and being prepared in the event of a wreck involving their livestock. Remember that our consumers (the public) don’t see pigs outside of trailers very often and they almost never see pigs being handled or moved. Reporters with video cameras will respond to wrecks and record every action. Sometimes, you may not be aware you are being watched. The following could be excerpts from eyewitness accounts of the same accident, what account will the urban public understand?

Swine worker account:
A truck hauling market hogs was involved in a wreck, which resulted in the trailer being overturned. The roof of the trailer was damaged and some pigs escaped. Some pigs were injured during the accident and died. The surviving animals were contained to prevent additional accidents, and eventually loaded into another trailer for transport to the packing facility. Other pigs suffered broken bones or severe cuts and were euthanized to prevent further suffering. The dead animals were taken to rendering. Luckily, no people suffered serious injuries. Overall, the response was rapid, organized, and effective given the difficult circumstances.

PETA officer account:
When I arrived on the scene, I saw a large hog truck on its side. There were pigs thrown from the truck into a field. Some were alive, some were not. The living ones were bleeding and terrified, and some were screaming in pain. When the slaughterhouse men with the captive-bolt guns approached the injured pigs, they would scream and try to escape. Their battered and broken bodies did not allow them to flee far. I asked one man if I could cover one of the pigs’ eyes with a sheet so that the animal wouldn’t be so terrified. The man said no. When the pigs would flail their heads around, one man would clamp the pig’s snout while the other man shot the pig in the head with the bolt gun. Unfortunately, the animals’ suffering did not end there. For several minutes, the screaming continued and the pigs writhed in pain, their mangled bodies twisting and squirming. Hours after the accident, when all the animals were finally dead, they were piled into a container with a front-end loader and were then taken to the meat plant for processing.
—Misty Collins, PETA field officer –source PETA.com
Moderator: Dr. Matthew Turner

Topics
1:00 – 1:20  Introduction/Impact of Truck Wreck on Industry Perception
             Dr. Matthew Turner, Veterinarian, Prestage Farms

1:20 – 1:40  Perspectives from the Highway Patrol
             North Carolina State Highway Patrol Officer

1:40 – 2:00  Safety and Media Relations
             Ms. Mary Beth Williams, Director Human Relations,
             Murphy-Brown, LLC-Waverly Division

2:00 – 2:20  Euthanasia
             Dr. Betty Herring, North Carolina Department of Agriculture

2:20 – 2:30  Break

2:30 – 2:50  Basic Response and Process
             Dr. Jeremy S Pittman, Veterinarian, Murphy-Brown, LLC-
             Waverly Division

2:50 – 3:10  Panel Discussion, Questions and Audience Experiences
Euthanasia in Pigs – Talking Points

1. Swine producers and veterinarians take their responsibilities to proper animal care seriously. Proper care includes individual treatment as well as minimization of pain and distress for an animal.

2. Recognizing when it is necessary to euthanize an animal and accomplishing the task in a humane manner is an unfortunate but integral part of that responsibility.

3. No one likes euthanizing animals. It is an unpleasant task but producers and veterinarians accept the responsibility for humanely ending an animal’s suffering as a last resort when treatment is impossible or impractical for pig welfare, economic or public health reasons. Proper and timely euthanasia is a responsibility of animal caretakers.

4. Producers must have a means to humanely euthanize pigs suffering from illness or injury when the veterinarian is not present.

5. Desired criteria for acceptable euthanasia methods:
   a. Humane – the method should minimize additional pain and distress to the animal, quickly render the animal insensible followed by rapid death.
   b. Safe for humans and other animals – human safety is a key component of an acceptable euthanasia strategy. Euthanasia methods that will kill a pig can potentially kill a human as well.
   c. Practical – the method has to be practical for use in a farm setting and be easy to conduct with minimal training for a diverse workforce. The method must use the tools available to the producer.
   d. Economic – the method must be economically viable for producers to implement.
   e. Minimize human stress – euthanasia is an inherently unpleasant task and emotionally stressful for the animal caretaker responsible. An acceptable method minimizes the stress on the caretaker.

6. The American Veterinary Medical Association and the American Association of Swine Veterinarians reviewed available research to evaluate acceptable methods of euthanasia. AASV, in collaboration with the National Pork Board, published a brochure for producers entitled On Farm Euthanasia of Swine – Options for the Producer which outlines the advantages and disadvantages of a number of methods of euthanasia which were deemed acceptable following a review of the scientific literature.
   a. CO₂ is only practical in relatively small pigs.
   b. Gunshot is dangerous to humans and other animals nearby and is not practical in baby pigs.
   c. Captive bolt is also dangerous to the operator and is not practical in baby pigs. Also, captive bolt is considered a method of stunning and must be followed with another method of euthanasia such as exsanguination.
   d. Electrocution is dangerous to humans and other animals and is only practical for small pigs in a farm setting.
   e. Anesthetic overdose is not practical or legal to have lethal drugs on-hand for routine euthanasia when the veterinarian is not present and is dangerous to humans if intentionally or accidentally injected and other animals that might consume the carcass.
f. Blunt trauma is only practical in baby pigs and is aesthetically displeasing but highly effective if done properly. Loss of consciousness is rapid.
7. Rapid insensibility and death should be confirmed.
LIVESTOCK EMERGENCY RESPONSE
TRUCK WRECKS

Mary Beth Williams
Manager of Human Resources
Murphy-Brown, LLC – Waverly Division

Emergency Response Team is NOT a matter of…
- Get Ready
- Get Set
- Go

Emergency Response Team MUST
- Be Ready / Prepared
- Be Set
- Go

Communication of the accident
- Network of telephone calls
- Dispatch for help
- Employees to bring necessary supplies and equipment
- Emergency response trailer
- Corral gates
- Trained employees to assist with animal handling
- Heavy equipment and operators
  o Backhoe
  o Heavy Wreckers
- Keep director of public affairs informed

Communication about accident scene
- Provide relevant information
- Has anyone been injured?
- Where is the accident?
- Best route to get to scene
- Does the best route change, blockades, etc

Law Enforcement Officers
- Work with cooperatively

First Responders
- Police Department / Highway Patrol
- Rescue Squad workers
- Animal Control Officer

At the Scene
- Human Safety is PARAMOUNT
- Driver of truck
- Any individuals involved in accident
- Workers helping at the scene
- Keeping hydrated by providing fluids
- Providing snacks/food
- Rotating workers

Conditions surrounding the scene
- Traffic
- Debris
- Animals must be handled with caution

Worker Safety
- Human safety takes precedence
- Methods, protocols based on human safety priority
- Don’t begin extraction until people/equipment ready
- Animals in the roadways
- Euthanasia method
- Animals dealt with when safe to do so
- Unstable trailers need to be stabilized
- Saws, PPE, slippage, debris, injury from stressed animals, etc. is all considered

Crowd Control
- To ensure safety
  - Protect workers
  - Protect bystanders
  - Protect animals
- To avoid
  - Interference
  - Harassment
  - Added stress
  - Property damage

Animal Activist Groups - People for the Ethical Treatment of Animals (PETA)
- Extremist
- Difficult to reason
- Not realistic
- Love publicity
- Distort information

Vet at the scene
- Takes control
- Makes decisions
- Provides direction
- Delegates
- Proper euthanasia

Media Relations
- Reporters & Photographers
- Newspapers
- Television Stations
- Helicopter Coverage
- One person should be designated to handle media relations – someone not involved with clean-up effort
- Ensure tarps are in place to block view

Media
- In the past:
  - “No Comment”
  - Was perceived as a negative response or as if we had something to hide.
- Now:
  - “We are in a state of an emergency. Please provide your contact information along with deadline and I will be glad to call you later or have someone to contact you.”
  - “In order to provide accurate information, upon completion of investigation we will contact you.”

Taking Photographs
- Any damage
- All vehicles involved
- Property
- Panoramic shots of the whole crash site
- The probable point of impact
- Skid marks
- Pictures of any contributing causes
  - Slick tires
  - Pot holes
  - Weather conditions

Reports
- Time frames
- Status of animals
- Who was at the scene / man-hours
- Accident Reports
- Internal
- Police
- Medical Reports
- Environmental
- Fuel and/or oil spills
- Property damage
- Out of pocket cost
Conclusion

- No two accidents are the same
- Something new is learned at every incident
- As long as human lives are spared, we can and will recover from the loss of animals and all the cost associated with the wreck
- The Emergency Response Team of Murphy-Brown, LLC – Waverly, will react to any call of need regarding swine truck accidents

- *We are ready, prepared and set to go!*
EUTHANASIA FOR TRUCK WRECKS

1- Euthanasia action plan in place?
   a. Company plan
   b. County EMS plan for truck wrecks?

2- Geographic location of wreck
   a. Can Company Truck Wreck crews reach the scene in an acceptable time?
   b. Do we have to rely on local resources to perform euthanasia, clean up?

3- Public visibility of wreck/ onlookers, press, children
   a. Are there barriers to use to block view?
   b. Can we construct temporary shields?
   c. Who talks to the press?!!!!!

4- Extent of injuries- salvage or euthanize
   a. Age of animal
   b. Cannot stand/walk or open wounds – euthanize
   c. Methods available (see attachment)

5- Cleanup
   a. Worth the trip to inspect site to prevent bad publicity
   b. Will landfills accept carcasses?
   c. Is site exactly as it was prior to wreck?

I-40 Corridor EMS/Animal Control contacts:

1- **Haywood County**- Pigeon River Gorge- frequent wrecks at this site. Emergency Management has an action plan for livestock truck wrecks. The plan involves Animal Control and gunshot is the method of euthanasia available. (The contact is Jean Hazzard, Director Haywood County Animal Control, phone 828-456-5338.)

2- **Buncombe County**- Emergency Management does not have a formal action plan but EM and Animal Control there state that Animal Control would be involved and gunshot would be the euthanasia method used. A Buncombe County Sheriff Deputy in on the Animal Control staff and would be authorized to use a firearm. (The contact is Lt. Helen Hall, Buncombe County Animal Control, 828-255-5555 or Sgt. Fish at 828-775-4403.)

3- **Burke County**- Plan for truck wreck includes Animal Control, Activation of CART (County Animal Response Team,) and utilizes gunshot as the method of euthanasia. A Burke County Sheriff Deputy is on staff at the Animal Control Department. (The contact is Burke County Animal Control, 828-438-5465.)
“By failing to prepare, you are preparing to fail” ~Benjamin Franklin

“Be prepared.” ~ Boy Scout Motto

It is unfortunate, but like all freight vehicles on the road, trailers hauling pigs sometimes have accidents. The main difference is that the cargo is alive. The accident scenes are never an easy sight, especially to the general public, however a timely and organized response to the accident can help make a bad situation better for the industry as a whole. Poor response and organization can therefore make a bad situation worse, and serve as an unnecessary “black-eye” for the entire industry.

With the number of trailers carrying livestock (especially pigs) in the states of North Carolina and Virginia alone, even a small percentage of accidents involving livestock appear to occur relatively frequently. For example, the 3 main packing plants in NC and VA receive approximately 72,000 market trucks per year. This number doesn’t even include the number of cull, feeder, breeding stock or wean pig movements on the highways. An estimated average number of livehaul accidents in NC and VA per year is 24, which is only 0.03% of the market trucks on the road and even less of the total number of all animal loads.

This paper is an outline of the steps that should be taken and/or considered when responding to an accident involving swine. It is by no means a complete manual as every accident scene and set of circumstances are different. I have tried to highlight important areas of response based on principles of incident command, official training documents and personal experiences of livehaul accidents.

Responsibilities of responders
- Safety of the driver, and all personnel (on the scene and in route) and the general public.
- The welfare of the animals.
- The humane treatment of animals.
- Protection of property.
- Ensuring a positive public perception of the industry.

Basics of Incident Command
- One person (Accident Lead Person) in command and that person must be kept informed.
- Teamwork is necessary.
- Chain of command must be respected.
- Respectful communication must be maintained with all personnel
- No renegades/cowboys – detrimental to process
- Failure to comply with above leads to a compromised accident scene, increases response time and expense.

Notes on responders
- Most emergency responders (Law enforcement, Fire/Rescue, Animal Control) have little to no experience with handling livestock
- Many transporters have little experience handling “stressed” livestock.
- Many livestock handlers have little to no experience in extraction or the equipment.
- Because of these factors, it takes strong teamwork and organization, and a specially trained response crew.

Local Responders Assistance
Law Enforcement
- Public Safety
- Traffic management, re-routing
- Crowd control, media control

Fire Department
- Securing scene and vehicle(s)
- Extrication – if necessary
- Water to cool animals in trailer or outside

All others (Good Samaritans, media, other “emergency” groups, bystanders)
- Stay out of the way!! For the safety of themselves, the rescue crews and the animals
- News helicopters can frighten and stress the animals. All attempts should be made to have law enforcement remove helicopters from scene.

First on scene
- Establish communication, exchange information with lead authorities already present at scene (highway patrol, police, sheriffs dept, etc.).
- If possible, move any loose animals off of the road or away from the accident scene
- Provide further assessment of scene to dispatch/management. Actual state of scene/trailer, specific location for better arrival directions, extra equipment required, etc.
- Establish Accident Lead person (usually the first qualified individual on scene). This will be the main contact/organizer for the scene.
- When team arrives, work with other authorities to control crowds, media, limit the number of people on the scene (including responders if too many)

Rescue and Recovery
- Note: It may take up to 2 hours before the actual extraction occurs, however response to the accident must occur prior to 2 hours (immediately).
- **Note:** The average response time and clean up is 6 hours, depending on trailer design, number of pigs on board and the position of the trailer following the accident.

- Corral loose animals if possible. Attempt to corral them in the same location where animals will be corralled after extraction. Priority are those animals in the roadways or other danger zones. Do not scare or run animals off. Usually a group of animals that have escaped will huddle together, not far from the site.

- Once all required rescue equipment is available and there are an ample number of responders available, rescue/ extraction can take place. **Not before!**

- Set up containment area for animals (corrals, portable fencing, on scene fence/barriers), both loose and still in the trailer.

- Once containment area is set up and proper equipment is available, begin extraction of the animals inside the trailer.

- As soon as qualified personnel and equipment is available and it is safe to do so, begin euthanasia of any injured animals.

- Euthanize injured animals as you come to them in the trailer, if it is safe to do so.

- Once animals have started to be extracted from the trailer, Accident Lead person is to direct dispatch to arrange transfer livehaul trailer(s). This is usually occurring simultaneously.

- Animals are loaded onto the transfer livehaul trailer in accordance with standard loading procedures and downer policy. Unfit animals are promptly euthanized. Only the bottom deck is utilized.

- Each animal is inspected and a head count is taken as animals are loaded onto the transfer livehaul trailer. A count is maintained of all live loaded animals, euthanized animals and dead animals. This count is compared with the load ticket/original number on the trailer.

- All animals must be accounted for prior to leaving the accident scene.

- Hot shots or prods should be discouraged when loading animals at an accident scene. Sort boards and rattle paddles are acceptable.

- Down, lame, or animals with broken legs should be euthanized where they are as soon as possible. If this is not possible, animals should be moved using sleds/slings and not be pulled/dragged. **Do not use snares to pull live animals!**

- Care should be taken when loading animals, take your time, show patience and composure, use publicly accepted terminology.

- As dead or euthanized animals are removed from the scene/trailer, they should be removed from the working area to a separate location for pick-up and covered. This prevents cluttering of the working area and curiosity by the live animals.

---

Notes on Extraction

- Accident Lead Person and rescue team should take ample time to properly assess accident scene and determine the best route/method of extraction. Take into account orientation of the trailer, side laying down, surrounding environment/landscape, type of trailer, corral point, transfer truck/cute location, condition of the inside of the trailer, etc.
- It must be determined if the trailer is stable to begin extrication, and if not a method of stabilization must be determined. Heavy duty tow trucks can be used to stabilize the trailer. Always be aware of the safety of the people entering the trailer, and never compromise the safety of the responders.

- Utilize opened areas on the trailer caused by the wreck if possible (i.e., torn roof, broken rear).

- Nearly 84% of trailers roll onto the right hand side, which makes extraction more difficult due to most trailers being designed with openings on the back left side of the trailer. Some trailer models have openings on both sides.

- When trailers roll over on their side, floor space is cut in half at best. If the rollover is incomplete (i.e., 45 degree angle), floor space quickly becomes far less.

- In loaded trailers, there can be multiple layers of pigs, which increases suffocation and injury risk. This also creates a safety issue for personnel that may have to climb over animals to access extraction points or free “keystone” animals.

- Have proper equipment for cutting into the trailer, however this will depend on what is available and where the access point is on the trailer.

- Some notes on extrication equipment:
  - Reciprocating saw – probably the tool used first by many. Works well on most thick, aluminum parts of the trailer. Aluminum will melt and bind/break blade, so use cooking oil, soap or some lubricant to prevent overheating. Have extra blades. Caution(s): Blade extends deep into trailer compartments, care must be taken and watch for pigs.
  - Skill saw – Works well with less limitations than reciprocating saw on binding. Depth of blade can be set to minimize extent into trailer compartment. Wide variety of blades for material type. Caution(s): Skill saws tend to “kick-back”.
  - Gas powered saw – Doesn’t require electricity, air compressor or other cables/hoses, therefore can be taken to any location. Caution(s): heavy/bulky equipment, “kick-back” is more severe, sparking possibility, blades extend into trailer compartment – watch for pigs.
  - Air chisel – Works very well and quick on aluminum roof/sections. Requires air compressor. Really loud and can only cut the roof, not braces or back end. Can be used around water. Not commonly available.
  - Crowbar, Sledge hammer – Not necessarily for getting into the trailer, but can be used to un-jam cut gate pins.
  - “Jaws of Life” – Not a good choice. “Jaws” pinch and tear metal, leaving jagged edges. Can’t cut close to an edge. Some responders seem quick to justify the use of this tool.
  - Cables, chain, ropes, etc. – Doors, sections of trailers have been pulled/torn off with tow trucks, backhoes, wenchers, etc. Caution(s): This is dangerous! Snapped cables, flying pieces, destabilize trailer, etc. If absolutely necessary, this should be done with extreme care and all personnel should be removed from scene.
- Try to prevent sharp edges and stepovers that make it more difficult or unsafe to work around.
- If the roof of the trailer is the access point, cut out a “door” and make it just wide enough for one (1) animal. Cut so that the roof braces make the frame of the door to add stability. For most trailers, cutting between three (3) braces is an appropriate size.
- Do not cut trailer side or roof so that a ramp is made, as the material is slippery.
- Use plywood sheets to make a solid floor, removing gaps caused by trailer sides, or damaged sections. Solid flooring helps when pulling dead animals out of the trailer by preventing legs getting caught.
- Use rice hulls, cat litter, sand, salt for grip to prevent slippage of personnel and animals. Trailer sides/boards get slippery very quick with manure, moisture, water, snow, mud, etc.
- Use wrenches, chains, cable, shackles, block and tackle to remove multiple dead animals from trailer at a time. This process is safer for responders (back strains, falls, etc.) and can effectively move more animals at a time for longer distances.
- Be sure to stagger heavy work of crew to prevent exhaustion, accidents, injury.

Notes on Euthanasia
- Safety comes first.
- Our policy is to “euthanize as you go”, to minimize animal suffering. Injured animals outside the trailer are euthanized as soon as possible. Injured animals inside the trailer are euthanized as soon as they are safely accessible.
- Euthanize animals out of sight of the general public and emergency responders, utilizing barricades, tarps and/or the trailer.
- Several methods of euthanasia are available, however acceptable methods are determined by operator safety, public safety, local regulations, availability, ease of use, etc. We prefer captive bolt with a CASH style pistol on all animals greater than 3 weeks (~12 lbs) of age. All other methods of euthanasia have a level of human safety concern that is not acceptable to our response team.
- CO₂ euthanasia would be preferred method for weaner pigs in the event of that type of incident.
- No live animals needing euthanasia should be removed from the scene.
- One person is assigned all euthanasia duties for the incident. This is primarily a veterinarian or certified production person if a veterinarian is not on scene. All parties, even the veterinarian should be trained in method of euthanasia (i.e., captive bolt).
- Unless absolutely necessary, law enforcement, although authorized to so, should not be involved with euthanizing animals.

Rescue and Recovery Complete
- Accident Lead Person contacts dispatch with total number of animals re-loaded for delivery to separate facility, processor, etc.
- Facilitate the removal of all dead and euthanized animals. Front-end loader and animal disposal truck.
- Dead animals can not be left in trailer and transported elsewhere.
- Used response equipment is cleaned and returned to central site location for clean-up and inventory
- Accident Lead Person to assess property damage, oil/fuel cleanup needs, removal of damaged vehicles and inspection of scene after clean-up

Biosecurity
- Our team responds to accidents regardless of the source/owner of the pigs and health status of animals involved in the incident may not be known. Care should be taken to observe proper biosecurity principles when returning to farms.
  - Case in point: Our rescue team responded to a livestock incident on the morning of April 2005 involving a load of markets headed to the Smithfield Plant in Smithfield, VA. The source farm was diagnosed with TGE that same day. Luckily no responders returned to pigs that day.
- All responders should have minimum 1 night down time (after the accident), or more if going in to high health herds.
- All equipment/clothes/boots used on scene should be discarded or cleaned and disinfected prior to use.

Post Accident
- Rescue unit equipment and trailer should be cleaned, inventoried and items replaced and/or added as soon as possible to be ready for the next accident response (Never know when it might be!)
- Response team completes accident reports and reviews incident for recommendations on continued improvement (process, equipment, etc.). Review of media response (newspaper articles, tv news, internet, activist websites) for “spin” on response protocols.
- We learn something new every time! We try to be prepared for the next one and any situation.

Acknowledgements
This paper/presentation could not have been written without the continued support and consultation of Livestock Handling Specialist Jennifer Woods. Jennifer Woods is the industry leader and expert on livestock accident response and specializes in training first responders and large integrated companies to accident response. She has trained over 2,000 responders throughout North America. Ms. Woods was paramount in helping Murphy-Brown, LLC and other large swine production companies in developing official Livehaul Accident Response Plans. More information about Ms. Woods’ training can be found at www.livestockhandling.net

The production, land and nutrient management, maintenance, human resource and transportation teams of the Murphy-Brown, LLC – Waverly Division. The members of this team have responded to several livehaul accidents over the years. It is simply impressive, the way this team responds to accidents and the knowledge and professionalism that has developed from these experiences.
Anyone who has ever positively responded to or assisted with a livestock accident.

References
- Livehaul Accident Response Manual, Murphy-Brown, LLC, Warsaw, NC.
A number of experienced livehaul accident responders in the Southeastern US were surveyed. They were asked “What items do you believe are necessary when responding to a truck wreck involving swine?” Their answers have been complied below and placed into one of four categories based on the number of responses for each item: 1) essential, 2) important, 3) optional, and 4) nice to have. This list is not meant to be all inclusive but may assist other responders in prioritizing necessary items in an emergency situation.

**ESSENTIAL (85-100% of responders believe necessary)**
- Bolt gun/ammo
- Extension cords
- Fence rods
- Fence webbing
- Herding boards
- Hog snare
- Saw – reciprocal (with extra blades)
- Solid fence sections
- Tools (hammer, pliers, vice grips, screw driver, adjustable wrench, etc)

**IMPORTANT (60-84% of responders believe necessary)**
- Bungee straps
- Duct Tape
- Fire Extinguisher
- First Aid Kit
- Flash light & extra batteries
- Generator
- Leather gloves
- Portable lights
- Sledge hammer
- Tarps

**OPTIONAL (40-59% of responders believe necessary)**
- Bailing wire
- Boots (rubber or disposable)
- Coveralls (or disposable coveralls)
- Fuel Spill Kit
- Paper towels
- Perimeter Security Tape
- Pig Sled
Plywood
Rattle paddles
Reflector Vest
Safety glasses
Shovel
Traffic signals

NICE TO HAVE (15-39% of responders believe necessary)
Broom – push
Chop Saw
Ear plugs
Electric Prods & extra batteries
Gasoline (for generator)
Grain shovel
Hard hats
Knee pads
Rain suits
Water cooler and drinking cups
Waterless hand sanitizer
Wood shavings
Wooden fence posts